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TITLE: GAP ALIGNMENT DEVICE  
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INVENTOR-INFORMATION:  
NAME  
UDA, KOJI

ASSIGNEE-INFORMATION:  
NAME  
CANON INC  
COUNTRY  
N/A

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ABSTRACT:

PURPOSE: To enable a gap measuring part and a pre-alignment detecting part to be integrated and made compact by mutually positioning a mask and a wafer while keeping them at a predetermined distance, and sharing the gap measuring part and a partial optical system of the pre-alignment detecting part.

CONSTITUTION: A title device comprises an optical distance detecting means for detecting the distance between a mask 12 on which a pattern to be exposed and transferred onto a wafer 13 were formed and the wafer 13, an optical

position detecting means which shares part of the above means for detecting the relative position between the wafer 13 and the mask 12, and a distance adjusting means for adjusting the distance. And it includes a position moving means for adjusting the relative position, and a control means for driving and controlling both the distance detecting means and the position detecting means based on the respective results of both means. With this, both operations of the gap adjustment and the relative positioning between the mask 12 and the wafer 13 are enabled automatically be performed within a short time without moving the mask or the wafer, and the device configuration is enabled to be simplified and small-sized.

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